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EXAMINER	
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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/008,603
Filing Date: November 09, 2001
Appellant(s): MIERSCH ET AL.

Miersch et al.,and the assignee, Ag-Bag International Limited
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 10/26/006 appealing from the Office action mailed January 11, 2005.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

The following is a listing of the evidence (e.g., patents, publications, Official Notice, and admitted prior art relied upon in the rejection of claims under appeal.

5,461,843	Garvin et al.	10-1995
4,579,654	Bremmer	04-1986
4,157,958	Chow	06-1979
3,981,803	Coulthard	09-1976
4,267,147	Pogoda et al.	05-1981

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

DETAILED ACTION

Information Disclosure Statement

The information disclosure statement (IDS) submitted on May 6, 2002 is being considered by the examiner.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 7-8 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garvin et al. (5,461,843) in view of Bremmer (4,579,654) and Chow (4,157,958). The system is being examined as an apparatus. Regarding claim 7, Garvin discloses a system (Figs.1 and 2) for generating methane gas (methane gas generated from compost) which comprises: a flexible bag (10) having an open end (52) for mounting to a bag (10) to a bag filling machine (38) for filling and compacting the bag with non-flowable material (Col. 3, lines 6-12), said bag having a horizontally extended tube length (18), a majority of said length filled with substantially non-flowable biomass material (compost) in a composition known to produce methane gas (gas generated from compose); and a remaining tubular length of the bag (inside top region of bag 10, Fig. 1) as removed from said machine being unfilled with the material, said open end (Col. 4, lines 53-55) tied off and filled with said gas emitted by biomass material (compost). Garvin fails to disclose an annoculant material to the biomass to induce a reaction of the biomass material and a pipe inserted through bag wall where filled with said gas for releasing methane gas from the remaining tubular length and a continuation of said pipe directing said gas to a gas collection site. Bremmer teaches suitable inoculum can be added to the manure (biomass) to facilitate the reaction and methane fermentation process (Col. 5, lines 10-24). Note, the Bremmer reference is introduced to aid in the clarity to the office action but the claimed "innoculant" is a process limitation, which does not impart patentability in an apparatus claim. In addition, the inclusion of material such as the innoculant or article worked upon by a structure being

claimed does not impart patentability to the claims. See *In re Young*, 75 F.2d 966, 25 USPQ 69 (CCPA 1935). Chow teaches the reaction vessel 10 is equipped with one or more vent lines 13 (pipe directing gas to a gas collection site) for removal of the gas and the gas is stored in a gas storage tank 15 (Col. 2, lines 21-28). Thus, it would have been obvious in view of Bremmer and Chow to one having ordinary skill in the art to modify the apparatus of Garvin with an inoculum as taught by Garvin to facilitate the fermentation process and a pipe inserted into the bag and/or vessel as taught by Chow in order to collect and store emitted gas from biomass material (compost). Regarding claim 8, Garvin shows a conduit (14 and 18) positioned inside the bag (10) at filled tubular length (space in the bottom of bag) and extended unfilled tubular length (space near top of bag) transmitting gas to the unfilled tubular length (Figs. 1 and 2). Regarding claim 11, Garvin discloses a filled bag 10 but fails to disclose a plurality of bags placed in adjacent relationship or connected in series and a gas line connected between the bags and the collection site. It would have been obvious in view of Garvin to one having ordinary skill in the art to duplicate additional bags to process additional batch of biomass material (compost). Note, the mere duplication of parts has no patentable significance unless a new and unexpected result is produced. *See In re Harza, 274 F.2d 669*, 124 USPQ 378 (CCPA 1960). Regarding claim 12, Garvin discloses the dominant portion of the biomass material is compost (Col. 3, lines 6-11), which includes animal waste.

2. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over applied references (Garvin '843 in view of Bremmer '654 and Chow '958) as applied to claim 8 above, and further in view of Coulthard (3,981,803). Regarding claim 9, the applied references discloses the claimed invention except a heating pad connected to a water source for flowing hot water through the pad and heating the material in the bag. Coulthard '803 teaches a heat exchanger 6, connected to a hot water source, is placed in the circular central pad 3 (Col. 5, lines 1-17) and such heat exchanger provides a heating means for controlling the temperature of the fermentation process. (Col. 8, lines 15-23). Thus, it would have been obvious in view of Coulthard to one having ordinary skill in the art to modify the apparatus of the applied references with a heating pad as taught by Coulthard in order to heat the organic waste material or compost to generate methane gas.

3. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over applied references as applied to claim 9 above, and further in view of Pogoda (4,267,147). The applied references disclose the claimed invention but fail to disclose a robe is placed over the bag, water lines are positioned between the bag and robe and hot water is circulated through the lines for heating the material in the bag. Pogoda teaches the use of a hot bottle type comprises of elastic body envelope 51 and the heating device 50 has a water inlet port 55 and an outlet port 56 and such heating device conforms to the surface area of the structural component (Fig. 1) and facilitates even distribution of heat to the structural component. Thus, it would have been obvious in view of Pogoda to

one having ordinary skill in the art to modify the apparatus of the applied references with a heating device as taught by Pogoda in order to facilitate even heat distribution between the heating device and the bag.

(10) Response to Argument

Applicants' arguments filed on May 22, 2006 have been carefully considered but they are not persuasive

In summary, it is submitted that essentially the only real issue present is whether the references can be combined because the facts are that the claims features themselves are individually taught by the prior art. Garvin discloses the system of the claimed invention and the only missing feature is the pipe inserted into the bag to direct the gas to a gas collection site. Chow teaches the vent lines 13 connection with the reaction vessel and the motivation to combine the teaching of Chow in Garvin's system is to facilitate the removal of gas from the reactor to the gas storage tank 15. The applied references disclose the apparatus with all the structural features of the claimed invention; therefore, one of ordinary skill in the art would have expected the system of the applied references is capable of producing methane gas.

(1) With respect to Applicants' argument (page 5 of 13) that the Garvin reference fails to disclose a "*system for generating methane gas, but, rather, never even mentions methane anywhere in the patent document*", Examiner respectfully disagrees. Garvin in

combination of Chow discloses the apparatus with all the structural features of the claimed invention; therefore, one of ordinary skill in the art would have expected the system of the applied references is capable of producing methane gas. In addition, an apparatus must be distinguished from the prior art in terms of structure rather than function. See *In re Schreiber*, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1977). "Apparatus claims cover what a device is, not what a device does." Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990).

(2) Applicant also argues the vent 34 of Garvin (page 6 of 13) alter the principle of the operation, Examiner respectfully disagrees. Garvin discloses the bags 10 are moisture proof and air tight (Col. 4, lines 20-26) and the air flow 30 reduces the moisture content, which facilitates the decomposition of the compost (Col. 1, lines 40-45). The introduction of oxygen (aerobic process) enhances the decomposition of the compost, but the introduction of oxygen does not hinder the production of the methane gas. Although, the anaerobic "process" as claimed generates methane gas but it is known in the art that the aerobic "process" also generates methane gas but at a much less valuable source of energy than then methane gas generates from anaerobic process (See USPN 5,269,634). Moreover, the argument with respect to the anaerobic process is a process limitation and a process limitation in an apparatus claim lacks patentable weight.

(3) The argument with respect to "aerobic process will not function to produce methane" is moot being the fact it is a process limitation. Note, an apparatus must be

distinguished from the prior art in terms of structure rather than function. See *In re Schreiber*, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1977).

(4) Applicant argues "air-methane mixtures are known to be potentially highly explosive at methane concentrations of 6 to 15 percent". Safety requirement is not a requirement for *prima facie* obviousness. See MPEP 2142.

In conclusion, the applied references disclose the claimed invention. For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Tom Duong TD

December 27, 2006

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